Community-Acquired Pneumonia, Child

Pneumonia is an infection that causes fluid to collect in the lungs. It is commonly a complication of a cold or other viral illness, but it is sometimes caused by bacteria. While colds and the flu can pass from person to person (are contagious), pneumonia is not considered contagious.

Viral pneumonia is generally less severe than bacterial pneumonia, and symptoms develop more slowly. Bacterial pneumonia develops more quickly and is associated with a higher fever.

What are the causes?

Pneumonia may be caused by bacteria or a virus. Usually, these infections result from inhaling bacteria or virus particles in the air.

Most cases of pneumonia are reported during the fall, winter, and early spring when children are mostly indoors and in close contact with others. The risk of catching pneumonia is not affected by the temperature or how warmly a child is dressed.

What are the signs or symptoms?

Symptoms of this condition depend on the age of the child and the cause of the pneumonia. Common symptoms include:

- A cough that brings up mucus from the lungs (productive cough). The cough may continue for several weeks even after the child has started to feel better. This is the normal way the body clears out the infection.
- Fever.
- Chills.
- Shortness of breath.
- Chest pain.
- Abdominal pain.
- Feeling worn out when doing usual activities (fatigue).
- Loss of hunger (appetite).
- Lack of interest in play.
- Fast, shallow breathing.

How is this diagnosed?

This condition may be diagnosed with:

- A physical exam.
- A chest X-ray.
- Other tests to find the specific cause of the pneumonia, including:
  - Blood tests.
  - Urine tests.
  - Sputum tests. Sputum is mucus from the lungs.
How is this treated?

Treatment for this condition depends on the cause and the severity of the symptoms. Treatment may include:

- Resting. Your child may feel tired and may not want to do as many activities as usual.
- Antibiotic medicine, if your child has bacterial pneumonia.

Most cases of pneumonia can be treated at home with medicine and rest. Hospital treatment may be required if:

- Your child is 6 months old or younger.
- Your child's pneumonia is severe.
- Your child requires oxygen to help him or her breathe.

Follow these instructions at home:

Medicines

- Give over-the-counter and prescription medicines only as told by your child's health care provider.
- If your child was prescribed an antibiotic, have your child take it as told by the health care provider. Do not stop giving the antibiotic even if your child starts to feel better.
- Do not give your child aspirin because it has been associated with Reye syndrome.
- For children between the age of 4 years and 6 years old, use cough suppressants only as directed by your child's health care provider. Keep in mind that coughing helps clear mucus and infection out of the respiratory tract. It is best to use cough suppressants only to allow your child to rest. Cough suppressants are not recommended for children younger than 4 years old.

General instructions

- Put a cold steam vaporizer or humidifier in your child's room and change the water daily. These are devices that add moisture (humidity) to the air. This may help keep the mucus loose.
- Have your child drink enough fluids to keep his or her urine clear or pale yellow. Staying hydrated may help loosen mucus.
- Be sure your child gets enough rest. Coughing is often worse at night. Sleeping in a semi-upright position in a recliner or using a couple of pillows under your child's head will help with this.
- Wash your hands with soap and water after having contact with your child. If soap and water are not available, use hand sanitizer.
- Keep your child away from secondhand smoke. Tobacco smoke can worsen your child's cough and other symptoms.
- Keep all follow-up visits as told by your child’s health care provider. This is important.
How is this prevented?

- Keep your child's vaccinations up to date.
- Make sure that you and all of the people who provide care for your child have received vaccines for the flu (*influenza*) and whooping cough (*pertussis*).

**Contact a health care provider if:**

- Your child's symptoms do not improve as told by his or her health care provider. If symptoms have not improved after 3 days, tell your child's health care provider.
- Your child develops new symptoms.
- Your child's symptoms get worse over time instead of better.

**Get help right away if:**

- Your child is breathing fast.
- Your child is out of breath and cannot talk normally.
- The spaces between the ribs or under the ribs pull in when your child breathes in.
- Your child is short of breath and makes grunting noises when breathing out.
- You notice widening of your child’s nostrils with each breath (*nasal flaring*).
- Your child has pain with breathing.
- Your child makes a high-pitched whistling noise when breathing out or in (*wheezing* or *stridor*).
- Your child who is younger than 3 months has a fever of 100°F (38°C) or higher.
- Your child coughs up blood.
- Your child vomits often.
- Your child's symptoms suddenly get worse.
- You notice any bluish discoloration of your child's lips, face, or nails.

**Summary**

- Pneumonia is an infection that causes fluid to collect in the lungs.
- It is commonly a complication of a cold or other infections from a virus, but is sometimes caused by bacteria.
- Symptoms of this condition depend on the age of the child and the cause of the pneumonia.
- Treatment for this condition depends on the cause and the severity of the symptoms.
- If your child's health care provider prescribed an antibiotic, be sure to give the medicine as told by the health care provider. Make sure your child finishes all his or her antibiotics.

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your health care provider.

Elsevier Interactive Patient Education © 2020 Elsevier Inc.